

U.S. Serial No. 09/179,188

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IN THE CLAIMS

1-19. (Canceled)

20. (Previously Presented) A method for recovery of nucleic acids from a material containing nucleic acids, which comprises:

a step of mixing a nucleic acid-containing material with an accelerator substance containing a chaotropic substance for binding of nucleic acids to a solid phase containing silicon oxide;

a step of contacting the mixture obtained in said mixing step with the solid phase containing silicon oxide to bind nucleic acids to the solid phase;

a step of isolating the solid phase containing bound nucleic acids from the mixture;

a step of washing the solid phase containing bound nucleic acids with a solution containing a chaotropic substance and then washing said solid phase with a solution containing alcohol and acetate; and

a step of eluting the nucleic acids from the solid phase obtained after said washing step.

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21. (Previously Presented) The method according to claim 20, wherein the alcohol is ethanol.

22-23. (Canceled)

24. (Previously Presented) The method according to claim 20, wherein the acetate is sodium acetate or potassium acetate.

25-28. (Canceled)

29. (Previously Presented) The method according to claim 20, which further comprises:

a step of removing alcohol and acetate remaining in the eluted nucleic acids.

30-32. (Canceled)

33. (Previously Presented) The method according to claim 20, wherein said contacting step includes stirring the mixture obtained in the mixing step with the solid phase at room temperature to bind the nucleic acids to the solid phase.

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34. (Previously Presented) The method according to claim 20, wherein the solid phase is selected from the group consisting of glass beads, silica powder, quartz filter paper, quartz wool, diatomaceous earth, and crushed products of said glass beads, silica powder, quartz filter paper, or quartz wool.

35. (Previously Presented) The method according to claim 20, wherein the washing step does not elute bound nucleic acids from the solid phase.

36. (Previously Presented) The method according to claim 20, wherein the solid phase includes particles having a particle size of about 1 to about 100 μm .

37-52. (Canceled)

53. (Currently amended) A method for purification of nucleic acids, comprising:

mixing ~~together~~ a nucleic acid-containing material[[,]]
with an accelerator substance containing a chaotropic
~~substance, and a solid phase containing silicon oxide,~~

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contacting the mixture of said nucleic acid-containing material and said accelerator substance with a solid phase to bind nucleic acids to the solid phase;

isolating the solid phase containing bound nucleic acids from the mixture;

washing the solid phase containing bound nucleic acids with a solution containing a chaotropic substance and then washing said solid phase with a solution containing alcohol and acetate; and

thereafter eluting the nucleic acids bound to the solid phase.

54. (Previously presented) The method according to claim 53, wherein the alcohol is ethanol.

55. (Previously presented) The method according to claim 53, wherein the acetate is sodium acetate or potassium acetate.

56. (Currently amended) The method according to claim 53, wherein ~~in the mixing step, the nucleic acids are bound to the solid phase by first mixing the nucleic acid containing material with an accelerator substance containing~~

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~~the chaotropic substance, and then stirring the mixture thus~~
obtained the mixture of said nucleic acid-containing material
and said accelerator substance is stirred with the solid phase
at room temperature to bind the nucleic acids to the solid
phase.

57. (Previously presented) The method according to
claim 53, wherein the solid phase is selected from the group
consisting of glass beads, silica powder, quartz filter paper,
quartz wool, diatomaceous earth, and crushed products of said
glass beads, silica powder, quartz filter paper, or quartz
wool.

58. (Currently amended) The method according to claim
53, wherein ~~the washing steps do not elute bound nucleic acids~~
~~from the solid phase~~ said solid phase containing bound nucleic
acids is washed with said solutions while maintaining said
nucleic acids bound to said solid phase.

59. (Previously presented) The method according to
claim 53, wherein the solid phase includes particles having a
particle size of about 1 to about 100 μm .

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60-64. (Canceled)

65. (Currently amended) A method for purification of nucleic acids, comprising:

mixing ~~together~~ a nucleic acid-containing material with an accelerator substance containing a chaotropic substance[[,]] and for binding of nucleic acids to a solid phase containing silicon oxide;

contacting the mixture of said nucleic acid-containing material and said accelerator substance obtained in the mixing step with [[a]] the solid phase to bind nucleic acids from the mixture to the solid phase containing silicon oxide;

isolating the solid phase containing bound nucleic acids from the mixture;

washing the solid phase containing bound nucleic acids with a solution containing a chaotropic substance and then washing said solid phase with a solution containing alcohol and acetate; and

thereafter eluting the nucleic acids bound to the solid phase.

66. (Previously presented) The method according to claim 65,

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wherein the alcohol is ethanol.

67. (Previously presented) The method according to claim 65, wherein the acetate is sodium acetate or potassium acetate.

68. (Previously presented) The method according to claim 65, which further comprises:

a step of removing alcohol and acetate remaining in the eluted nucleic acids.

69. (Previously presented) The method according to claim 65, wherein said contacting step includes stirring the mixture obtained in the mixing step with the solid phase at room temperature to bind the nucleic acids to the solid phase.

70. (Previously presented) The method according to claim 65, wherein the solid phase is selected from the group consisting of glass beads, silica powder, quartz filter paper, quartz wool, diatomaceous earth, and crushed products of said glass beads, silica powder, quartz filter paper, or quartz wool.

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71. (Currently amended) The method according to claim 65, wherein ~~the washing step does not elute bound nucleic acids from the solid phase~~ said solid phase containing bound nucleic acids is washed with said solutions while maintaining said nucleic acids bound to said solid phase.

72. (Previously presented) The method according to claim 65, wherein the solid phase includes particles having a particle size of about 1 to about 100 μm .